

Maximizing Energy Efficiency for Economic Growth

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Maryland Energy Administration Director

\$ 41 Million – 2014

\$40 Million – 2015

\$35 Million – 2016

Energy grants from the Maryland Energy Administration for Government Agencies, Businesses, Non Profits and Residents



Maryland
Energy
Administration

www.Energy.Maryland.gov

Key: Energy Efficiency

40%

Percent of GHGs
reduction required by
2030 from the 2016
Green House Gas
Reduction Act.

Turn your property into an ATM with energy efficiency.



**Every \$1 saved is a full \$1 of operating income
added to the bottom line.**



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Supporting MD Counties

State and Local Energy Grants

[Animal Waste to Energy Program](#)

[Commercial & Industrial Grant Program](#)

[Combined Heat and Power Grant Program](#)

[Data Center Energy Efficiency Pilot](#)

[Jane E. Lawton Conservation Loan Program](#)

[Maryland Smart Energy Communities](#)

[Offshore Wind Workforce Development Grant Program](#)

[Parking Lot Solar PV Canopy with EV Charger Program](#)

[State Agency Loan Program](#)

County	EE Upgrade	Grant	Payback	Energy Savings
Frederick County	All-Electric Transit Bus	\$65,855	3.8 yrs.	7,533 gal of gas/year
Harford County	Parking lot lights	\$52,750	4.1 yrs.	4,388 kWh or \$842.40/year
Montgomery County	LED lighting retrofits	\$85,000	5.1	139,941 kWh or \$16,739 /year



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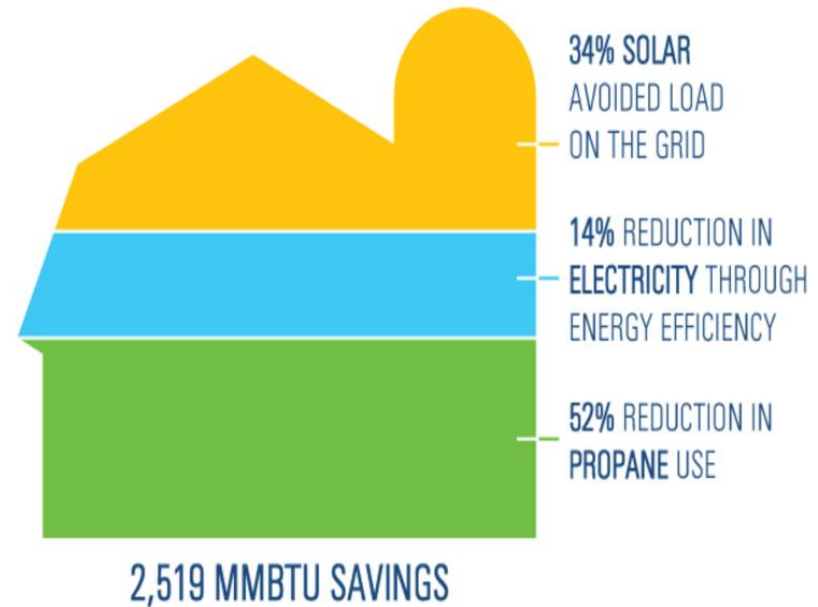
Supporting MD Businesses

FUEL TYPE	MMBTU IMPACT	% SAVINGS
ELECTRIC	339	14%
PROPANE	1,321	52%
TOTAL ENERGY SAVINGS	1,660	66%
SOLAR	859	
TOTAL IMPACT	2,519	

ESTIMATED COSTS, SAVINGS, AND PAYBACK	
ESTIMATED ANNUAL ENERGY COST SAVINGS	\$74,211
ESTIMATED INSTALLED COST	\$1,026,513
ESTIMATED PAYBACK IN YEARS	13.8

ANNUAL GREENHOUSE GASES REDUCTION	
CO ₂ (METRIC TONS)	939.74

That's like avoiding the emissions from 100 Maryland homes for a year!



Business Energy Grants

Animal Waste to Energy Program
Commercial Clean Energy Grant Program
Commercial & Industrial Grant Program
Combined Heat and Power Grant Program

Data Center Energy Efficiency Pilot
Kathleen A. P. Mathias Agriculture Energy Efficiency Program
Offshore Wind Development Program
Parking Lot Solar PV Canopy with EV Charger Program



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MD Energy Jobs

Maryland Job Growth Area:

ENERGY EFFICIENCY

67,000

56% installation

14% trade

11% professional services

SOURCE: 2017 U.S. Energy and Employment Report



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Energy Efficiency Jobs

INDUSTRY SECTORS:

- Electric power generation
- Electric power transmission
- Wholesale energy trade & distribution
- Storage
- Heat/cooling/building envelope efficiency
- Fuels & motor vehicles

DIRECT INVOLVEMENT:

- Research & development
- Energy production
- Equipment manufacture
- Sales/distribution
- Installation/maintenance

INDIRECT INVOLVEMENT:

- Consulting
- Finance
- Tax services
- Legal services

SOURCE: "U.S. Energy and Employment Report," BW Research Partnership



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Energy Efficiency in Maryland: By the Numbers

68% have under 10 permanent employees

4% have 100-249 permanent workers

One third of firms derive all revenue from EE goods & services

Another 26% obtain “half to most” of their revenue from EE

EMPLOYMENT BY COUNTY

MONTGOMERY	11,625
PRINCE GEORGES	6,495
BALTIMORE COUNTY	6,067
ANNE ARUNDEL	4,647
BALTIMORE CITY	4,496
HOWARD	2,828
FREDERICK	2,511
HARFORD	1,650
CARROLL	1,535
CHARLES	1,388

EMPLOYMENT BY DISTRICT

1	7,998
2	6,875
3	8,138
4	5,127
5	3,966
6	9,072
7	1,263
8	4,284

Offshore Wind

Offshore Wind Business Development Grant

Provides funding to help offset upfront barrier costs in market entry assistance, and capital expenditures / facilities upgrades.

Offshore Wind Workforce Development Grant

Provides funding to ensure Maryland has a ready and able workforce capable of contributing to the workforce required.

9,685

Estimated Maryland jobs for the two off shore wind developments

4,977

Number of Maryland jobs required by Public Service Commission

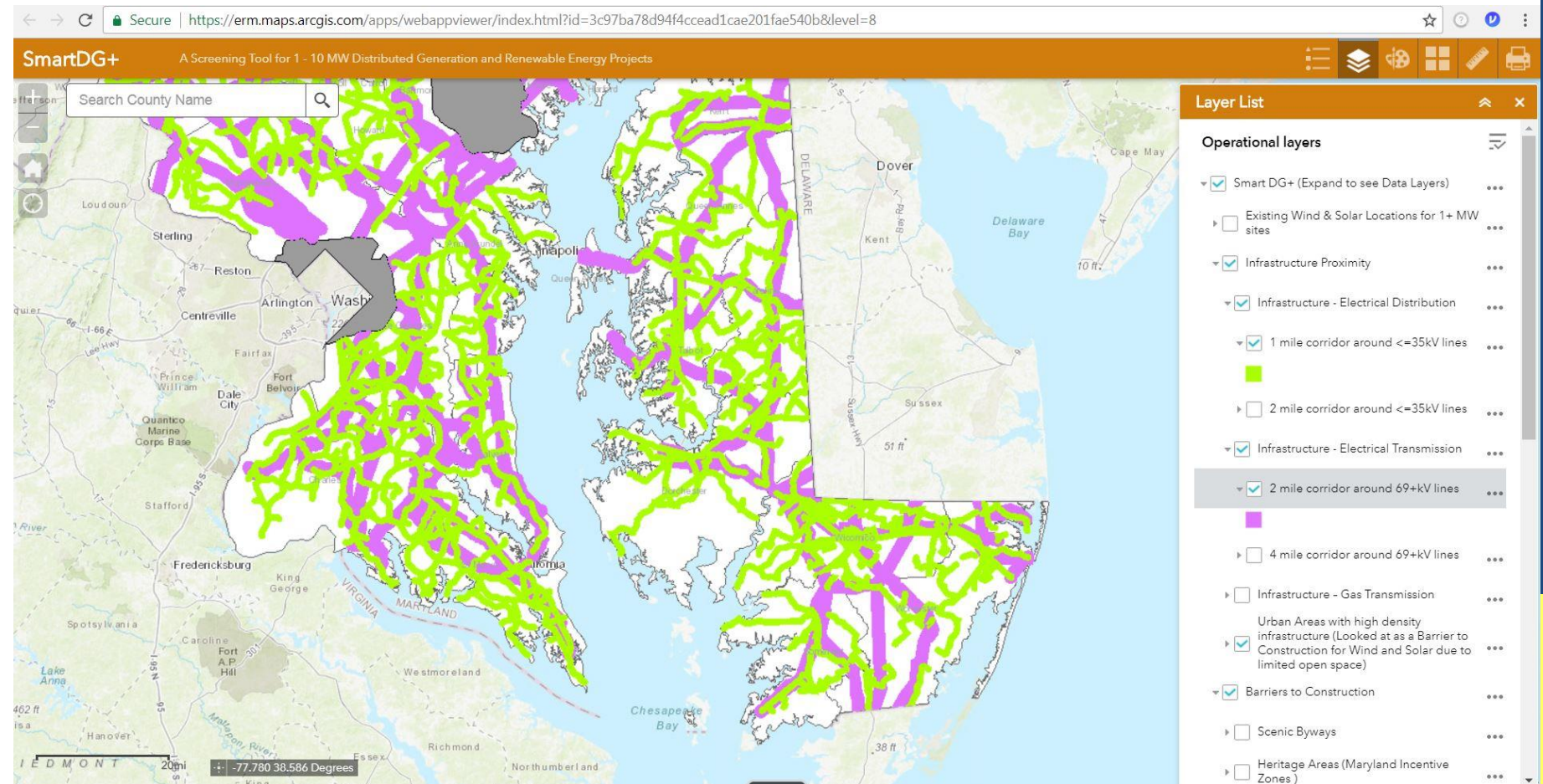


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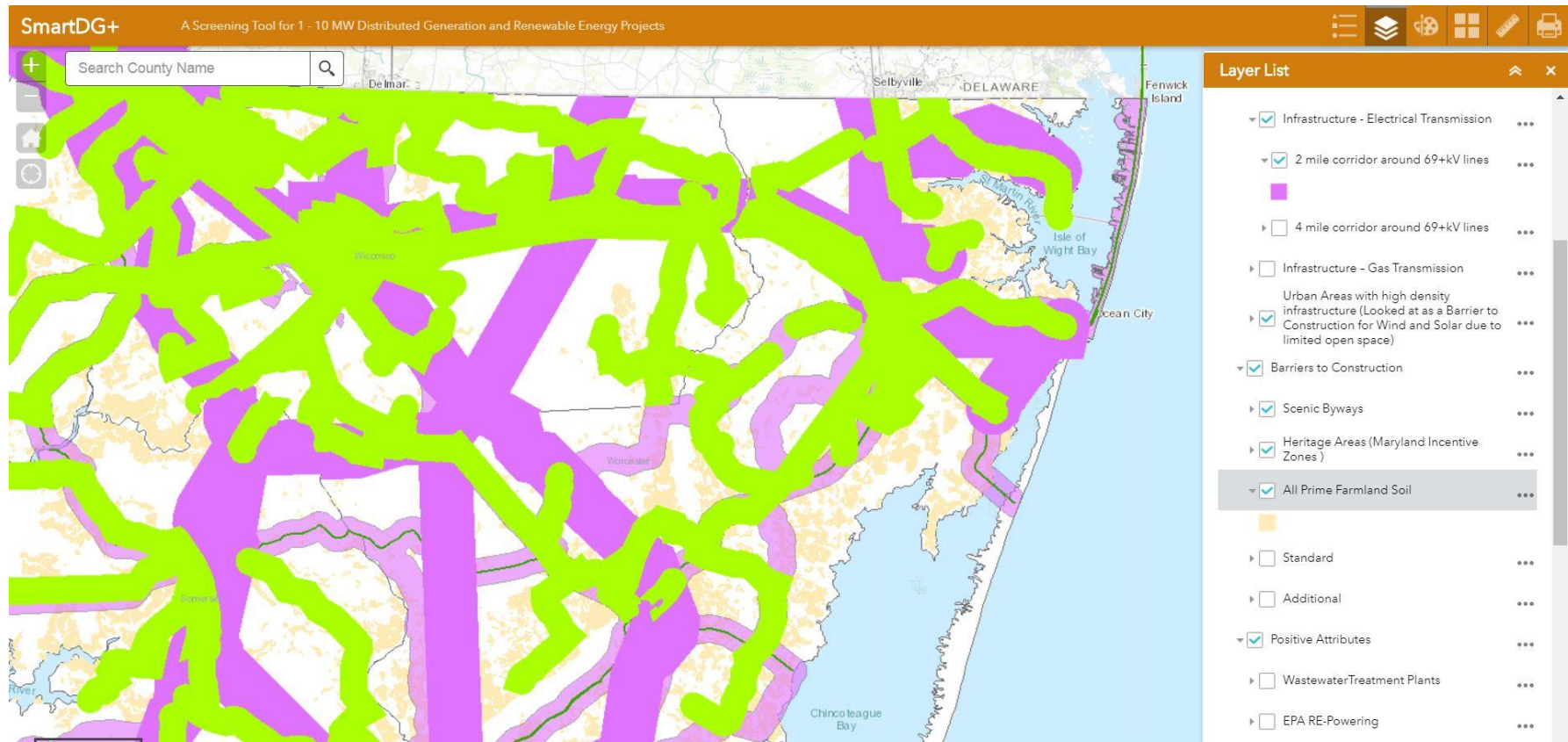
MD Energy Jobs

Larger Scale Renewables- Smart DG+ Tool



MD Energy Jobs

Larger Scale Renewables- Smart DG+ Tool (continued)



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Thank you

- Information on Maryland Energy Administration programs can be found at www.energy.Maryland.gov.
- The Smart DG+ tool can be found on the Department of Natural Resource's Power Plant Research Program website at <http://pprp.info/SmartDG/Index.htm>.
- Questions?

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